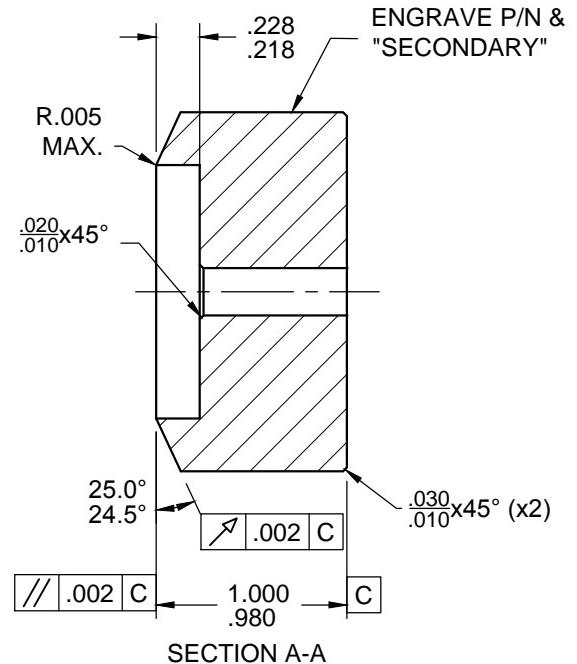
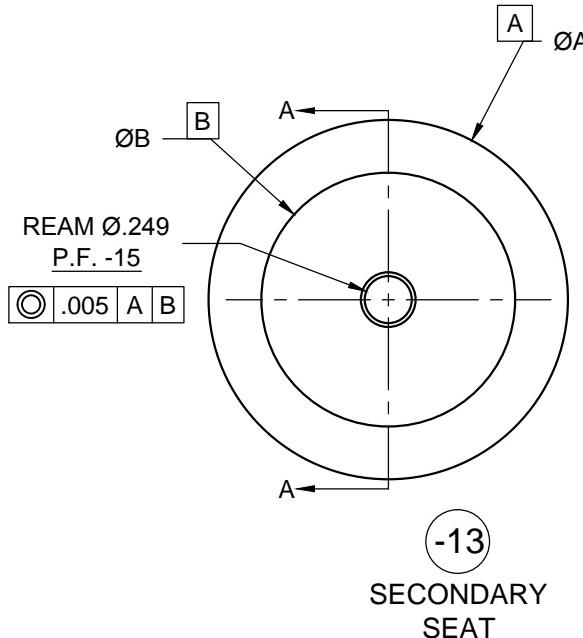


NOTES

- #### 1. BREAK ALL SHARP CORNERS (.015/.03).

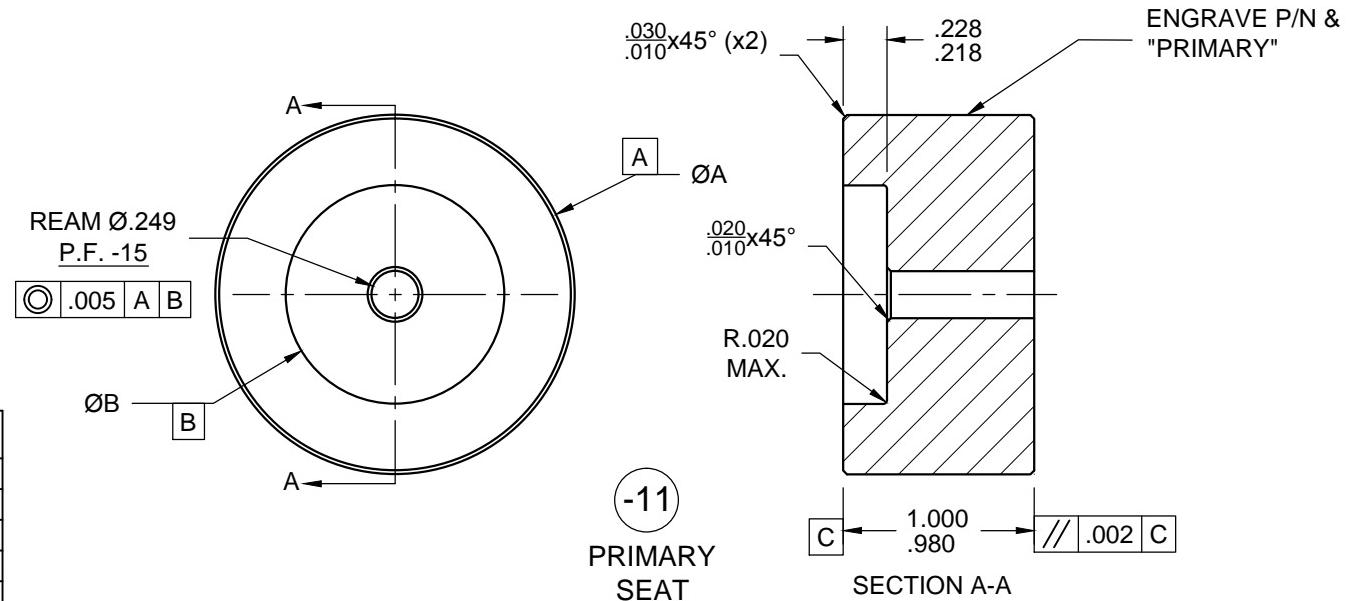
 RED BARN MACHINE	
TITLE KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS; LOCATING PIN	
DWG NO.	REV 1
TOOL# (see chart)-15	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS	
.XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± .5°
X ± .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
SCALE	NTS
DATE	6-26-08
SHEET 9 of 9	



NOTES

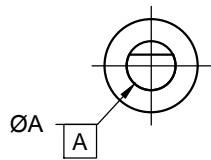
- #### 1. BREAK ALL SHARP CORNERS (.015/.03).

RB		RED BARN MACHINE		
TITLE KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS; SECONDARY SEAT				
DWG NO. TOOL# (see chart)-13			REV 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS $.XXX \pm .005$ FRACTIONS $\pm 1/32$ $XX \pm .01$ ANGLES $\pm 5^\circ$ $X \pm .1$			DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ PR. 015 R. 2. DIMENSIONAL LIMITS APPLY AFTER PLATING				
SCALE	NTS	DATE	6-26-08	SHEET 8 of 9

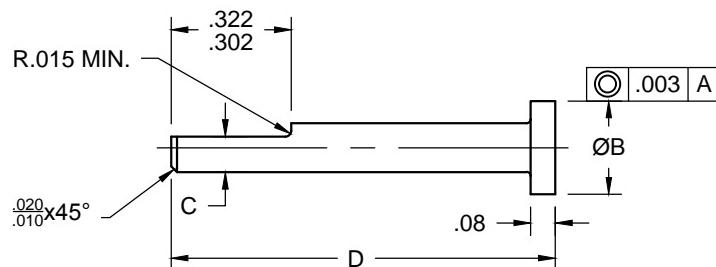


NOTES

 RED BARN MACHINE	
TITLE KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS; PRIMARY SEAT	
DWG NO.	TOOL# (see chart)-11
REV 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS	
.XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± .5°
.X ± .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 X 45° PR. .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
SCALE	NTS
DATE	6-26-08
SHEET	7 of 9



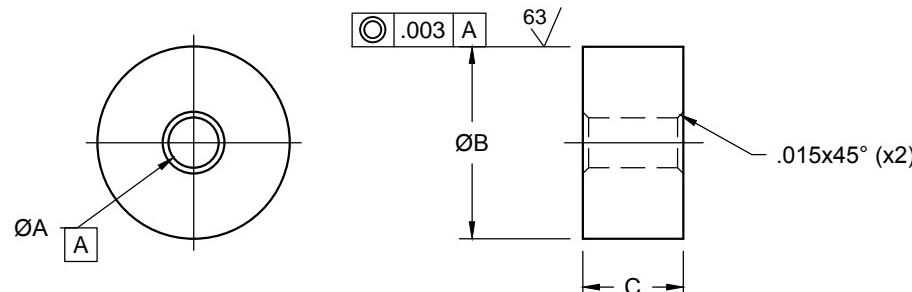
-9
PIN



NOTES

- #### **1. BREAK ALL SHARP CORNERS (.015/.03).**

DWG NO.		TITLE KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS; PIN	
TOOL# (see chart)-9		REV 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS $.XXX \pm .005$ $.XX \pm .01$ $X \pm .1$		DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC BLACK OXIDE USED ON BEARING SEE Pg. 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING			
SCALE	NTS	DATE	6-26-08
		SHEET	6 of 9



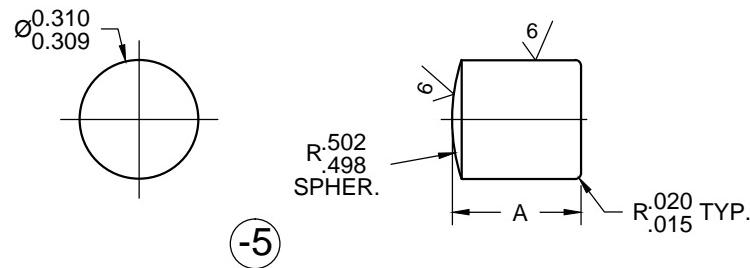
-7

GUIDE

NOTES

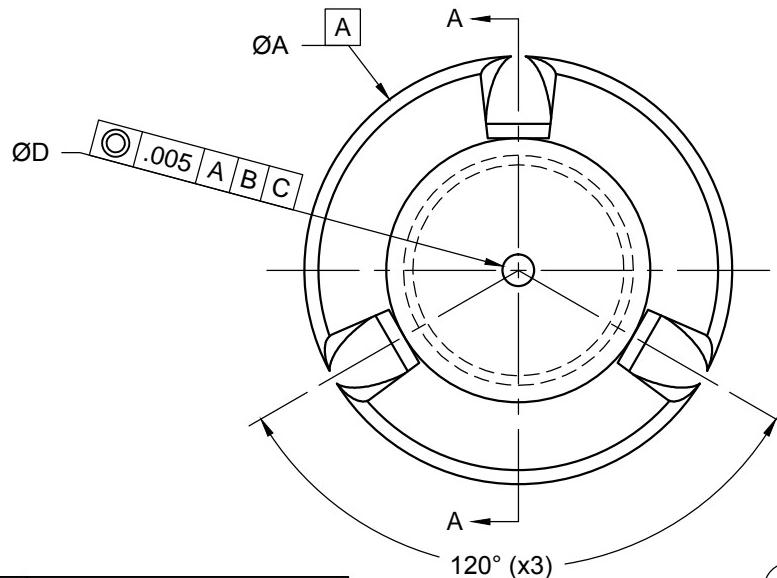
- ### **1. BREAK ALL SHARP CORNERS (.015/.03).**

 RED BARN MACHINE	
TITLE KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS; GUIDE	
DWG NO.	REV 1
TOOL# (see chart)-7	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS	
.XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± .5°
X ± .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC	
USED ON BEARING SEE Pg. 1	
SCALE	NTS
DATE	6-26-08
SHEET 5 of 9	



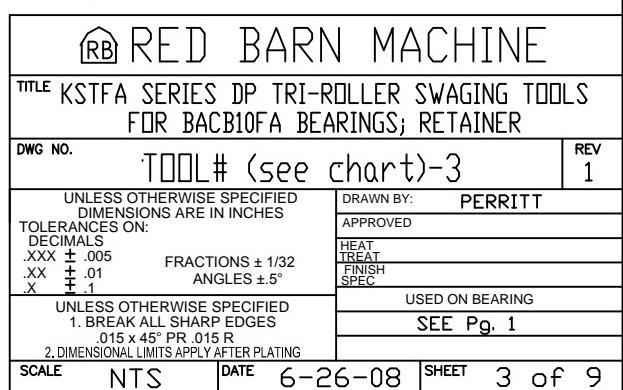
ROLLER

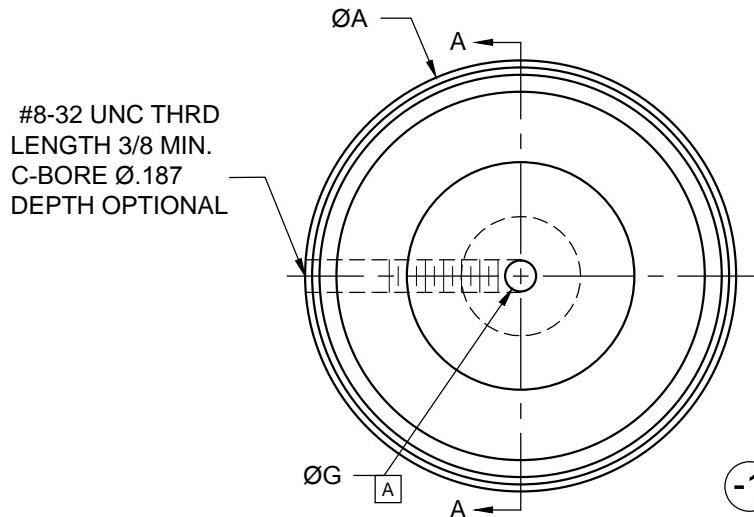
 RED BARN MACHINE	
TITLE KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS; ROLLER	
DWG NO.	TOOL# (see chart)-5 REV 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS	
.XXX ± .005	FRACTIONS ± 1/32
.XX ± .01	ANGLES ± .5°
X ± .1	
UNLESS OTHERWISE SPECIFIED	
1. BREAK ALL SHARP EDGES .015 x 45° PR. 015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY:	PERRITT
APPROVED	
HEAT TREAT	
FINISH SPEC	
USED ON BEARING	
SEE Pg. 1	
SCALE	NTS
DATE	6-26-08
SHEET	4 of 9



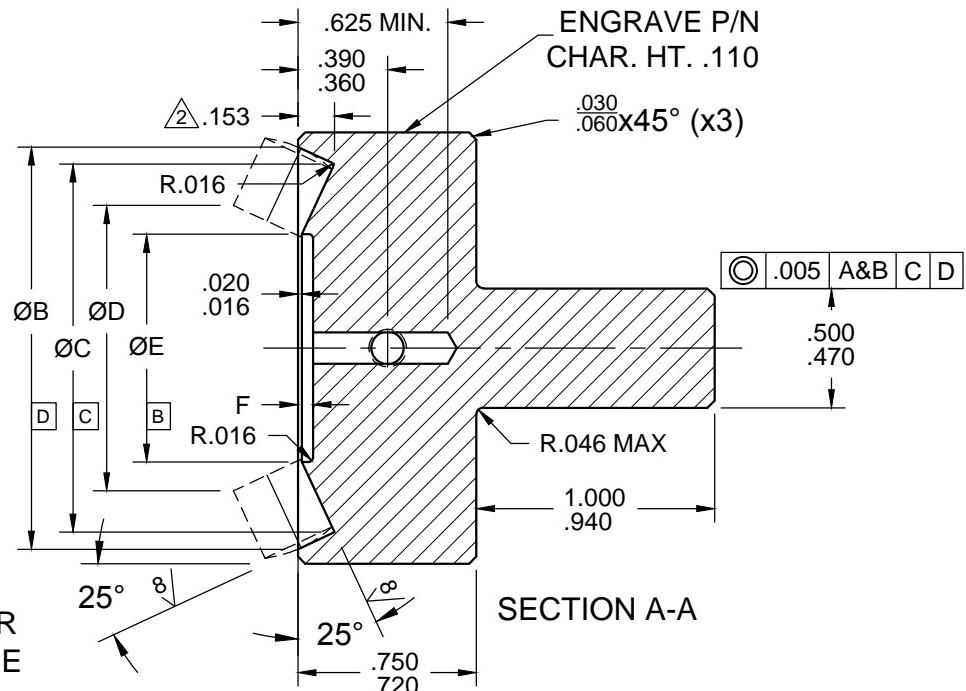
-3

RETAINER





#8-32 UNC THRD
LENGTH 3/8 MIN.
C-BORE Ø.187
DEPTH OPTIONAL



ROLLER FIXTURE

-1

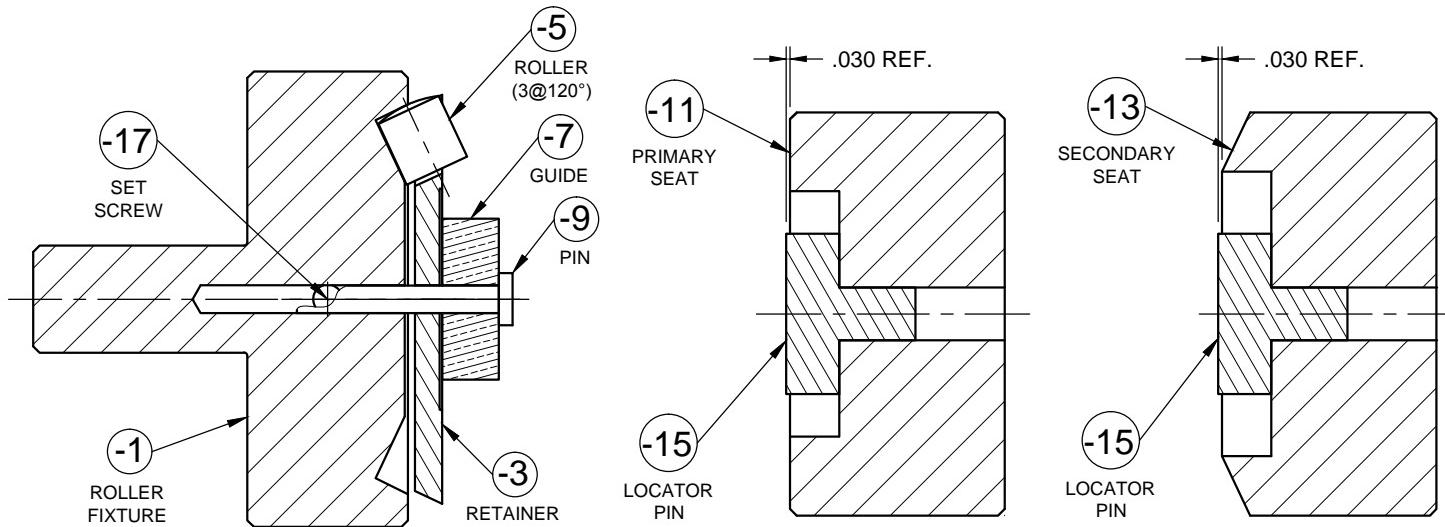
SECTION A-A

NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).
 2. DIMENSION TO BOTTOM OF R.016=.153;
DIMENSION TO SHARP CORNER=.158.
 3. -1 BEARING RACE SURFACES MUST HAVE

MACHINING MARKS AND GROOVES.
 4. DO FIRST ARTICLE INSPECTION

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGED -5 ROLLER RADUIS FROM .005 -.010, TO .015 -.020; AND -9 PIN RADIUS FROM .015 MAX., TO .015 MIN. ALSO CHANGED -7 SLEEVE TO -7 GUIDE.	7/7/08	WP	DW



DRILL PRESS TRI-ROLLER SWAGING TOOL ASSEMBLY

NOTES

1. -5 ROLLERS MUST TURN FREELY IN -3 RETAINER POCKETS.
 2. -5 ROLLERS & -3 RETAINER MUST TURN FREELY WHEN TOOL IS COMPLETELY ASSEMBLED.
 3. FLAT END OF ROLLERS MUST FACE TOWARDS THE CENTER OF THE TOOL WHEN ASSEMBLED.

ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	B/O INFORMATION OR SPECIFICATIONS
		-1	1	ROLLER FIXTURE	SEE CHART
		-3	1	RETAINER	SEE CHART
		-5	3	ROLLER	SEE CHART
		-7	1	GUIDE	SEE CHART
		-9	1	PIN	SEE CHART
		-11	1	PRIMARY SEAT	SEE CHART
		-13	1	SECONDARY SEAT	SEE CHART
		-15	2	LOCATING PIN	SEE CHART
B/O		-17	1	SOCKET HEAD SET SCREW	#8-32 x 1/4

RB		RED BARN MACHINE	
TITLE	KSTFA SERIES DP TRI-ROLLER SWAGING TOOLS FOR BACB10FA BEARINGS		
DWG NO.	SEE CHART ABOVE FOR TOOL No.		REV 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN BY: APPROVED:	PERRITT
TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± .5° X ± .1		HEAT TREAT FINISH SPEC	LISTED PER ITEM LISTED PER ITEM
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 0.15 x 45° PR 0.15 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON BEARING SEE ABOVE	
SCALE	NTS	DATE	6-26-08
SHEET	1 of 9		

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MAT.	B/O INFORMATION OR SPECIFICATIONS
			-1	1	RND	6061	Ø8-1/4 x 3-7/8
ASSY #							

REVISIONS					
REV	DESCRIPTION	DATE	INITIAL	APPR	
—	—	—	—	—	—

**NOT APPROVED FOR PRODUCTION
APPROVED FOR PRODUCTION**

DESCRIPTION	MAT.	B/O INFORMATION OR SPECIFICATIONS	Pg.
	6061	Ø8-1/4 x 3-7/8	2

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON:
DECIMALS
XXX \pm .005 FRACTIONS \pm 1/32
XX \pm .01 ANGLES \pm 5°
X \pm .1
HEAT
FINISH
SPEC

DRAWN BY: PERRITT
APPROVED
USED ON MODEL

 RED BARN MACHINE	
TITLE	
DWG NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS $.XXX \pm .005$ FRACTIONS $\pm 1/32$ $.XX \pm .01$ ANGLES $\pm .5^\circ$ $X \pm .1$	
DRAWN BY: PERRITT APPROVED HEAT TREAT FINISH SPEC	
USED ON MODEL 1. BREAK ALL SHARP EDGES $.015 \times 45^\circ$ PR. .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE	NTS
DATE	8-15-07
SHEET	1 of

NOT APPROVED FOR PRODUCTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

PART #	QTY	DESCRIPTION
-1	1	--

DRAWN BY:	PERRITT	RB RED BARN MACHINE
CHECKED		
HEAT		
TREAT		
FINISH		
SPEC		
USED ON MODEL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
?	TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° .X ± .1	
	UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 0.015 x 45° PR. 0.015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DWG NO.	TITLE	
SCALE	PART #	REV.
NTS	1-28-06	SHEET 1 of 1